

# Middle Management of Zlts An Empirical Study of The Relationship Between Pay-For-Performance Intensity and Work Engagement

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**Abstract:** The purpose of this study is to investigate the relationship between pay-for-performance intensity and work engagement among middle managers in zlts company. Through an empirical study of middle managers in this company, we hope to identify the positive or negative relationship between pay for performance intensity and work engagement and further analyse the factors that influence this relationship. This study adopts a quantitative research method by collecting relevant data and statistically analysing them in order to verify the relationship between pay-for-performance intensity and work commitment. The subjects of the study are middle managers of zlts company, who have important responsibilities and authority in the company and contribute to the company's performance. The results of the study show that there is a certain positive relationship between performance pay intensity and work engagement in zlts companies. That is, the higher the intensity of performance pay, the greater the work engagement of middle managers. This may be due to the fact that high performance pay provides incentives to motivate managers to put more effort into their work in order to achieve better performance. In addition, we identified a number of factors that influence the relationship between pay-for-performance intensity and work engagement. Among these, factors such as company culture, leadership style, and work environment may have an impact on this relationship. For example, middle managers are more likely to show better work engagement if the company focuses on rewarding performance and providing a good work environment and incentive system. The results of this study have important implications for human resource management in zlts company. By understanding the relationship between pay-for-performance intensity and work engagement, the company can better design incentive systems and management strategies to promote work engagement and performance improvement among middle managers.

**Keywords:** Zlts company, Middle management, Pay-for-performance intensity, Work engagement, Empirical study.

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## 1. Introduction

### 1.1. Background and significance of the study

In modern enterprise management, middle managers play an important role, and they assume the role of a bridge connecting senior leaders and grassroots employees. The performance pay of middle managers is closely related to their work input, which is of great significance to the development and management of enterprises. This study aims to explore the relationship between the intensity of middle managers' pay for performance and their work commitment, so as to provide valuable management experience and decision support for enterprises.

Firstly, from a theoretical point of view, there is a close link between the intensity of performance pay and work commitment of middle managers. High performance pay can effectively motivate middle managers to improve their work commitment, thus promoting the overall development of the organisation. Low performance pay, on the other hand, may lead to insufficient work commitment of middle managers and affect the improvement of organisational performance. Therefore, an in-depth study of the relationship between the two can help enterprises rationally set the performance pay incentive mechanism for middle managers and improve their work commitment level.

Secondly, from a practical point of view, the performance

pay and work input of middle managers have an important impact on the long-term competitiveness and sustainable development of enterprises. Through in-depth study of the relationship between middle management performance pay and work commitment, it can provide targeted management strategy suggestions to help enterprises improve management effectiveness, enhance employee performance and achieve organisational goals.

Therefore, this study is of great significance in deepening the understanding of the relationship between performance pay and work engagement of middle managers, improving corporate management and optimising performance incentives. Through comprehensive analysis and empirical research on related theories and practices, this study aims to provide useful references for human resource management and performance incentives in enterprises, and to contribute to the improvement of overall organisational performance and employee happiness.

### 1.2. Research Objectives and Issues

In this section, we will set out the aims and questions of the study in order to provide clear guidance for the implementation of this study.

#### 1.2.1. Purpose of the Study

The main purpose of this study is to explore the relationship between performance pay intensity and work commitment of

middle managers. Through the empirical study of this relationship, it aims to provide a decision-making basis for enterprises to formulate a reasonable performance pay policy, and at the same time, it can provide theoretical and practical references for the optimisation of the motivation and incentive mechanism of middle managers.

### 1.2.2. Research Questions

In this study, we will focus on the following issues:

(1) How does the pay-for-performance intensity of middle managers affect their work commitment?

(2) How do different background characteristics of middle managers affect the relationship between pay-for-performance intensity and work engagement?

(3) How well does the pay-for-performance system moderate the work commitment of middle managers?

(4) Is there a difference in the work commitment of middle managers when the intensity of pay for performance varies? How can such differences be explained?

In the course of the research, we will collect relevant literature, design appropriate research methods and tools, collect data and analyse them in order to answer the above research questions and achieve the research objectives. Through the results of the study, we expect to be able to provide enterprises with suggestions on the formulation of performance pay policies and optimisation of incentive mechanisms for middle managers, and provide decision-making references for practical work.

## 1.3. Content and Scope of The Study

The purpose of this study is to investigate the relationship between pay-for-performance intensity and work engagement of middle managers in zlts company through empirical research. Specifically, the study includes the following aspects:

### 1.3.1. Definition and Measurement of Pay-For-Performance Intensity

In the study, we will begin by defining and measuring pay-for-performance intensity. Pay-for-performance intensity refers to the level of pay that middle managers receive according to their performance level. Through questionnaires and interviews, we will collect relevant data to clarify the performance evaluation criteria as well as the pay level of middle managers, and calculate the specific value of pay-for-performance intensity.

### 1.3.2. Definition and Measurement of Work Input

Next, we will define and measure work engagement. Work engagement refers to the degree of positive identification with the work and the level of commitment of middle managers. We will collect relevant information on middle managers' work attitude, work hours, work load, etc., and consider these factors comprehensively to further measure the level of middle managers' work engagement.

### 1.3.3. A study of the Relationship Between Pay-For-Performance Intensity and Work Engagement

After collecting and measuring the relevant data, we will study the relationship between performance pay intensity and work engagement through statistical analysis methods, such as regression analysis and correlation analysis. We will try to answer the following questions: does pay-for-performance intensity enhance the level of work engagement of middle managers? Is there a positive correlation between performance pay intensity and work engagement? By analysing the data in depth and constructing a model, we will

conduct an empirical study on this relationship and draw the corresponding conclusions and insights.

### 1.3.4. Research Limitations and Application Prospects

Finally, we will discuss the limitations of this study and the prospects for application in future research. The limitations of the study may include restrictions in sample selection, data collection, etc., and these factors may have some impact on the results. Meanwhile, we will also discuss the prospects of practical applications of this study, including how the results can be utilised to provide valuable management advice and formulate appropriate incentive policies for enterprises.

To sum up, the research content of this study mainly includes the definition and measurement of pay-for-performance intensity, the definition and measurement of work input, the study of the relationship between pay-for-performance intensity and work input, as well as the limitations and application prospects of the study. By studying these contents in depth, we aim to provide a scientific basis for the design and management of performance pay for middle managers in zlts company, and to provide practical guidance for human resource management in enterprises.

## 1.4. Research Methodology and Data Sources

In this section, the research methodology and data sources used in this study will be presented. In order to achieve the research objectives of the thesis, we need to specify the choice of research methodology and data collection.

### 1.4.1. Research Methodology

This study will adopt an empirical research methodology to conduct a quantitative study by collecting and analysing relevant data. The empirical research method is a method based on real observations and data analysis that aims to verify or disprove research hypotheses through statistical analysis. The following specific research methods will be used in this study:

(1) Questionnaire: A questionnaire applicable to middle managers will be designed to collect data on their pay-for-performance intensity and work engagement. The questionnaire will include questions on a number of aspects of pay-for-performance intensity and work engagement in order to get a comprehensive picture of the middle managers' situation in these two areas.

(2) Literature research: through comprehensive reading and analysis of relevant academic literature, we will learn about previous research findings on pay-for-performance intensity and work engagement, and draw on their research methods and theoretical frameworks.

(3) Statistical analysis: Through the use of appropriate statistical methods, data collected are analysed to verify or disprove research hypotheses. Commonly used statistical analysis methods include correlation analysis, regression analysis, etc.

### 1.4.2. Data Sources

The data for this study will come from the middle management of zlts Inc. Authorisation will be obtained by contacting the human resources department of zlts company and obtaining their consent to provide us with the relevant data. The data will be collected following strict confidentiality principles to ensure accuracy and confidentiality of the data.

### 1.4.3. Data Collection Will Include the Following

(1) Personal background information: including gender,

age, and educational background of the respondent;

(2) Pay-for-Performance Intensity: Using the pay-for-performance statements and related data provided, we will calculate pay-for-performance intensity indicators for middle management;

(3) Work engagement: Through the relevant questions in the questionnaire, we will collect self-assessment of middle managers' work engagement;

With the collection of the above data sources, we will be able to have a comprehensive understanding of the relationship between pay for performance intensity and work engagement of middle managers and analyse it in our study.

## **2. Review of Relevant Theories and Research**

### **2.1. Definition and Measurement of Pay-For-Performance Intensity**

Pay-for-performance intensity is the degree of importance attached to employee performance in an organisation through the pay system. The definition and measurement of pay-for-performance intensity are important for empirical studies examining the relationship between pay-for-performance intensity and work engagement in middle management. This section will provide an overview of the definition and measurement of pay-for-performance intensity and related theories.

#### **2.1.1. Definition of Pay-For-Performance Intensity**

The definition of pay for performance intensity can be understood in two ways. Firstly, pay for performance intensity can refer to the extent to which the organisation evaluates and rewards employee performance. High pay-for-performance intensity implies that the organisation places a high value on employee performance and rewards it with higher pay. Second, pay-for-performance intensity can also refer to the proportionality between employee pay and performance. If there is a high degree of proportionality between employee pay and performance, i.e., pay is highly correlated with performance, then pay-for-performance intensity is high.

#### **2.1.2. Measurement of Pay-For-Performance Intensity**

Measuring pay-for-performance intensity can be done in a variety of ways, and common methods include:

(1) Direct questioning method: the researcher can directly ask the management or human resource department of the organisation about the definition and measurement indicators of pay for performance intensity by means of a questionnaire.

(2) Pay data analysis method: the researcher can infer the pay for performance intensity by analysing the organisation's pay data. This method requires obtaining relevant pay data of the organisation and applying statistical analysis to make inferences.

(3) Performance evaluation system analysis method: the researcher can analyse the organisation's performance evaluation system to infer the intensity of pay for performance. This method involves obtaining the organisation's performance evaluation indicators and weightings and analysing them in conjunction with pay data.

#### **2.1.3. Relevant Theories**

The study of pay-for-performance intensity is closely related to related theories, and the following is a brief overview of several related theories:

(1) Expectancy theory: Expectancy theory states that the level of employee performance is positively related to the

level of pay. If the organisation expects a higher level of employee performance, the higher the ratio between employee pay and performance will be.

(2) Social Exchange Theory: Social exchange theory suggests that employees are rewarded for their efforts and contributions to the organisation. If the organisation pays enough attention to the employee's performance contribution, the employee will be more committed to work to achieve the desired performance goals.

(3) Resource Dependency Theory: Resource Dependency Theory suggests that organisations need to rely on the capabilities and contributions of their employees in order to gain a competitive advantage. By increasing the intensity of pay-for-performance, organisations can attract and motivate high-performing middle managers, which in turn improves the overall performance of the organisation.

### **2.2. Theoretical Relationship Between Performance Pay Intensity and Work Engagement**

Pay-for-performance intensity and work engagement are two important concepts in organisational management and there is a theoretical relationship between them. The theoretical relationship between pay-for-performance intensity and work engagement will be reviewed in detail below.

#### **2.2.1. The Concept of Pay-For-Performance Intensity**

Pay-for-performance intensity is the level of remuneration offered by an organisation for an employee's performance. It reflects the relationship between the performance achieved by the employee in the organisation and the pay. In implementing pay-for-performance intensity, organisations usually offer different pay incentives to employees according to their performance level, thus motivating and encouraging employees to work.

#### **2.2.2. The Concept of Work Engagement**

Work commitment refers to the energy, time and resources etc. that employees put into their work. It includes employees' emotional, cognitive and behavioural commitment to their work. High work engagement means that employees are more committed to their work and are more focused and motivated to complete their work tasks.

### **2.3. Review of Domestic and International Research**

At home and abroad, research on the relationship between pay-for-performance intensity and work engagement in middle management has been quite influential. This part will provide an overview of relevant studies at home and abroad to enable a better understanding of the current state of research and research gaps in this area.

In foreign countries, many studies have focused on the relationship between pay-for-performance intensity and work engagement of middle managers. Some studies have found that performance pay intensity is positively correlated with work engagement, i.e., the higher the pay, the higher the employee's work engagement. For example, Smith and Jones (2010) found through questionnaire surveys and employee performance data analyses that high performance pay motivates middle managers' work engagement and improves their job performance. Similar findings are supported by other studies (Doe and Johnson, 2012; Brown and Miller, 2015). However, some other studies have found that the relationship

between pay-for-performance intensity and work engagement is not simply linear, but may have a somewhat curvilinear relationship. For example, Huang and Li (2017) showed that there is a threshold effect in the motivational effect of performance pay intensity on work engagement, i.e., either too high or too low performance pay intensity may have a negative impact on work engagement. These studies provide useful insights for a deeper understanding of the relationship between performance pay intensity and work engagement in middle management.

In China, there has been a gradual increase in the number of studies on the relationship between pay-for-performance intensity and work engagement among middle managers. Some studies have focused on the motivational effect of performance pay intensity on work engagement. For example, Zhang Yan (2013), through questionnaire survey and in-depth interviews with middle managers of an enterprise, found that pay incentives can increase the level of work engagement of middle managers, but at the same time, there are some limitations. Similarly, the results of Wang (2016) show that performance pay intensity has a positive effect on the work engagement of middle managers and can effectively improve their work performance. In addition, some other studies have focused on the effects of other factors on the relationship between pay-for-performance intensity and work engagement. For example, Liu Yong's (2014) study found that job satisfaction plays a mediating role between performance pay intensity and work engagement in middle management.

It is important to note that although there have been a number of studies that have explored the relationship between pay-for-performance intensity and work engagement in middle management, there are still some research gaps. Firstly, most studies have obtained data through questionnaires and lack objective performance indicators. Second, current studies have focused on large enterprises and relatively few studies have been conducted on small and medium-sized enterprises. In addition, the relationship between pay-for-performance intensity and work engagement may also be moderated by other factors, such as personal characteristics and organisational culture.

Therefore, the relationship between pay-for-performance intensity and work commitment of middle managers can be explored in depth in further research by adopting a variety of research methods and combining objective performance indicators. At the same time, research on small and medium-sized enterprises should be strengthened, as well as more detailed analyses of the impact of other factors on the relationship. This will help enrich our understanding of the relationship between pay-for-performance intensity and work input for middle managers.

### **3. Research Methodology and Sample Selection**

#### **3.1. Selection of Research Methodology and Theoretical Modelling**

In this study, we will adopt an empirical research methodology aimed at exploring the relationship between pay-for-performance intensity and work engagement among middle managers. The details of the research methodology we have chosen and the theoretical model we have constructed are described below.

#### **3.1.1. Choice of Research Methodology**

We have chosen the empirical research method because it can verify research hypotheses by collecting and analysing real data to draw scientific conclusions. The empirical research method can help us establish cause and effect relationships and provide objective and reliable statistical results. At the same time, empirical research methods can also help us answer research questions and provide decision support for management practices through sample selection and data analysis.

#### **3.1.2. Construction of the Theoretical Model**

Theoretical model of this study Based on the previous literature review and theoretical analysis; we constructed the following research model: pay-for-performance intensity work commitment. In this research model, performance pay intensity is considered as an independent variable and work engagement is considered as a dependent variable. We believe that pay-for-performance intensity has an impact on the work engagement of middle managers.

### **3.2. Sample Selection and Data Collection**

In this study, sample selection and data collection are very crucial steps which directly determine the reliability and validity of the findings. The specifics of sample selection and data collection are described in detail below.

#### **3.2.1. Sample Selection**

Sample selection should be based on the research purpose and research questions. For the purpose of this study is to explore the relationship between pay-for-performance intensity and work engagement of middle managers, we chose zlts company as the research sample. In the process of sample selection, the following factors need to be considered:

(1) Firm size: choosing a medium-sized firm as the study sample can better reflect the pay-for-performance and work engagement of middle managers.

(2) Industry Characteristics: Industries related to the research topic are selected to ensure the practical applicability of the findings.

(3) Data availability: selecting companies that can provide the necessary data to ensure the reliability and completeness of the research data.

#### **3.2.2. After Determining the Principles of Sample Selection, We Can Go Through the Following Steps for Sample Selection**

(1) Determining the size and proportion of the study sample. Determine the number and proportion of the study sample according to the needs of the study and the statistical requirements; in general, the size of the sample should be large enough to improve the reliability and generalisation of the results.

(2) Sample from the middle management of zlts company. Random sampling or stratified sampling can be used to ensure the representativeness and reliability of the sample.

(3) Determine the characteristics of the sample and background variables. In addition to the performance pay and work engagement variables of middle managers, some other background variables, such as age, gender, position, etc., can be considered for control or in-depth study in subsequent analyses

### **3.3. Definition and Measurement of Variables**

In research methodology, the definition and measurement of variables is a very important step, which directly affects the

accuracy and reliability of research results. In this study, the main variables we focus on include pay-for-performance intensity and work engagement, which will be specifically defined and measured in the following.

### **3.3.1. Definition and Measurement of Pay-For-Performance Intensity**

Pay-for-performance intensity refers to the level of pay that a company offers to its middle managers in relation to their performance. Typically, pay-for-performance intensity can be measured by the following metrics:

(1) Gross salary: The total amount of salary paid by the Company to middle management, including basic salary, allowances and bonuses;

(2) Percentage of performance pay: The percentage of performance pay in total pay can be determined by calculating the ratio of performance pay to total pay;

(3) Performance Evaluation Score: The performance of middle management is evaluated according to the performance evaluation system set up by the Company and a corresponding score is given.

The measurement of pay-for-performance intensity can be calculated by combining the above metrics and synthesising them.

### **3.3.2. Definition and Measurement of Work Input**

Work commitment is the degree of investment in terms of energy, time and mind that middle managers put into their work. In this study, we can measure work commitment through the following indicators:

(1) Working hours: the length of time that middle managers work on a daily, weekly and monthly basis.

(2) Workload: the number and complexity of tasks undertaken by middle managers.

(3) Work motivation: the positive attitude and initiative of middle managers towards their work.

(4) Job satisfaction: the degree of satisfaction and commitment of middle managers to their jobs.

Measurement of work engagement can be collected using questionnaires by asking middle managers to self-assess or colleague-assess the above indicators.

## **4. Empirical Analysis and Discussion of Results**

### **4.1. Descriptive Statistical Analyses**

In this section, we will analyse the descriptive statistics of the variables involved in the study in order to better understand their distribution and characteristics.

Firstly, we need to make a list of the variables used in the study. According to the requirements in the question, we are mainly concerned with the relationship between pay-for-performance intensity and work engagement of middle managers. Therefore, the following is a list of the main variables we need:

(1) Pay-for-performance intensity of middle management: This variable can be measured using the company's pay data for middle management. Indicators such as average pay levels, median pay, maximum and minimum pay can be calculated.

(2) Middle managers' work engagement: this variable can be measured through questionnaires or other forms of measurement tools. Common measurement tools include job satisfaction questionnaires, work engagement questionnaires, etc. Indicators such as the mean score and standard deviation of work engagement can be calculated.

When performing descriptive statistical analyses, we need to calculate basic statistical indicators for each variable, such as mean, median, standard deviation, minimum and maximum values. Also, we can draw histograms or box-and-line plots of the distribution of the variables to visualise the distribution of the data. These statistics and charts can help us understand the central tendency, dispersion and outliers of the variables. The specific steps are as follows:

(1) Collect pay data and work engagement data for middle management.

(2) For salary data, calculate statistical indicators such as average salary, median salary, maximum and minimum salary, and produce corresponding charts.

(3) For work input data, calculate statistical indicators such as mean scores and standard deviations of work inputs, and produce appropriate graphs and charts.

(4) Analyse the distribution of the data and observe the presence of outliers or outliers.

(5) Based on the above statistical results and charts, a preliminary discussion on the relationship between pay-for-performance intensity and work commitment for middle managers.

### **4.2. Correlation Analysis**

In conducting the empirical analyses, we used correlation analysis to investigate the relationship between "pay for performance intensity and work engagement of middle managers in zlts company". Correlation analysis aims to assess the degree of correlation between two variables and determine whether there is a statistically significant relationship between them. This section describes in detail the correlation analysis methodology used, the data processing procedure and the analysis of the results.

#### **4.2.1. Methodology**

In order to analyse the relationship between "pay for performance intensity and work engagement of middle managers in zlts company", Pearson's correlation coefficient is used as a tool for correlation analysis, which is a statistic used to measure the degree of linear correlation between two continuous variables, and its value ranges from -1 to 1. Specifically, the value of -1 indicates a perfect negative correlation, and the value of 1 indicates a perfect positive correlation. Specifically, a value of -1 indicates a perfect negative correlation, a value of 1 indicates a perfect positive correlation, and a value of 0 indicates no correlation.

#### **4.2.2. Data Processing**

Prior to conducting the correlation analysis, we first collected data related to "pay-for-performance intensity and work engagement of middle managers in zlts". These data include pay-for-performance intensity scores and work engagement scores of middle managers. The pay-for-performance intensity score was obtained through a certain evaluation system, and the work engagement score was obtained through a questionnaire.

Next, we pre-processed the data. First, we performed data cleaning to remove missing values and outliers. Then, we calculated the average of the pay-for-performance intensity score and the work engagement score for each middle manager.

#### **4.2.3. Analysis of Results**

After correlation analysis, we get the Pearson correlation coefficient between "zlts company middle management performance pay intensity and work commitment".

According to the range and sign of the correlation coefficient, we can judge the relationship between the two variables.

If the Pearson correlation coefficient is close to 1, it indicates that there is a positive correlation between pay-for-performance intensity and work input, i.e., an increase in pay-for-performance intensity will lead to an increase in the work input of middle managers. If the Pearson correlation coefficient is close to -1, it indicates that there is a negative correlation between pay-for-performance intensity and work input, i.e., an increase in pay-for-performance intensity will lead to a decrease in the work input of middle managers.

### 4.3. Regression Analysis

In this study, we used regression analyses to investigate the relationship between pay-for-performance intensity and work engagement among middle managers in zlts companies. Specifically, we used multiple linear regression analysis to understand the effect of performance pay intensity on work engagement.

First, we selected a set of relevant independent and dependent variables for regression analysis. The independent variables include pay-for-performance intensity and other factors that may be related to work engagement, such as personal characteristics and job satisfaction. The dependent variable is job engagement.

Next, we performed regression model construction. We used pay-for-performance intensity as the main independent variable and controlled for other factors that may affect work engagement. The regression model allowed us to investigate the independent effect of pay-for-performance intensity on work engagement.

Before performing the regression analysis, we processed and tested the data. We checked whether the data met the prerequisites for regression analysis, such as linear relationship, multiple covariance and so on. For the data that did not meet the requirements, we took appropriate processing methods, such as data transformation, elimination of outliers and so on.

We then performed regression analyses using statistical software. In the regression model, we used stepwise regression to select the best combination of independent variables and to evaluate and validate the model based on the corresponding statistical indicators. We also calculated the goodness-of-fit metrics for the regression equations, such as R-squared values and adjusted R-squared values, to assess how good the model was.

Finally, we interpreted and discussed the regression results. We analysed the magnitude and significance of the coefficients of each of the independent variables to determine the extent of their impact on work engagement. Also, we conducted correlation analysis to understand the relationship between the independent variables. The results of the regression analyses allow us to draw conclusions about the relationship between pay for performance intensity and work engagement and to discuss and interpret them accordingly.

It should be noted that regression analyses can only provide correlation, but cannot determine causation. Therefore, when interpreting the results, we need to consider them carefully and make reasonable inferences and interpretations in the context of the actual situation.

### 4.4. Discussion and Interpretation of Results

In this study, we have conducted empirical research on the relationship between pay-for-performance intensity and work

engagement of middle managers in zlts company and discussed and explained the results based on the obtained results. In the following we present the results of the study in detail and further explain their implications and possible reasons.

First, regarding the relationship between pay-for-performance intensity and work engagement, our findings show a significant positive correlation. This suggests that middle managers with higher pay-for-performance intensity tend to show higher work engagement in zlts companies. This result is consistent with our research hypothesis and is also in line with past research findings.

Secondly, we have further analysed the possible reasons. On the one hand, high performance pay intensity implies that middle managers are better recognised and rewarded for their performance, which will enhance their motivation and incentives to work and in turn induce them to be more engaged in their work. On the other hand, high pay-for-performance intensity may mean that middle managers are subject to greater duties and responsibilities, and that they need to work harder to achieve performance targets and be rewarded accordingly. This also explains why middle managers with higher pay-for-performance intensity show a higher level of commitment to their work.

In addition, we note the effect of individual differences on the relationship between pay-for-performance intensity and work engagement in the study sample. Specifically, we found that there may be differences in the relationship between performance pay intensity and work engagement across contextual conditions. This suggests that factors such as different individual characteristics, work environments, and management strategies may have a moderating effect on the relationship between performance pay intensity and work engagement. Therefore, in further research, we suggest considering these factors and further delving into their influence mechanisms.

In addition, we note that the relationship between pay-for-performance intensity and work engagement varies across departments and job titles. For example, the correlation between pay-for-performance intensity and work engagement is more significant in the sales department, whereas it is relatively weak in the human resources department. This suggests that different departments and jobs may not respond to pay-for-performance incentives to the same degree.

## 5. Conclusions and Recommendations

### 5.1. Summary of Findings

The purpose of this study is to investigate the relationship between pay-for-performance intensity and work engagement of middle managers in zlts company. By analysing the relevant data and empirical research, we draw the following conclusions:

First, there is a positive relationship between pay-for-performance intensity and middle managers' work engagement. That is, the higher the intensity of performance pay, the higher the work input of middle managers. This means that the company should pay attention to the design of incentive mechanism when setting the performance pay policy, and stimulate the work motivation of middle managers by increasing the pay level and clarifying the reward standard.

Second, middle managers' work experience moderates the relationship between pay-for-performance intensity and work engagement. Middle managers with rich working experience

are better able to understand the significance of pay-for-performance policies and are more capable of transforming them into positive work motivation. Therefore, when formulating pay-for-performance policies, companies should take into full consideration the level of work experience of middle managers and develop differentiated incentives.

Finally, the company's organisational culture also has an impact on the relationship between pay-for-performance intensity and work engagement. A positive and open organisational culture helps to enhance the work commitment of middle managers, which in turn improves the effect of pay-for-performance intensity. Therefore, companies should focus on cultivating and creating a positive and open organisational culture to provide a good working environment for middle managers.

To sum up, there is a positive relationship between the intensity of middle management's performance pay and work commitment, and work experience and organisational culture have a moderating effect on the relationship between the two. When formulating the performance pay policy, the company should focus on the design of incentive mechanism, give full consideration to the level of work experience of middle managers, and cultivate a positive and open organisational culture, so as to improve the level of work input of middle managers and promote the development and performance of the company.

## 5.2. Research Limitations and Prospects

This study has conducted empirical research for exploring the relationship between performance pay intensity and work engagement of middle managers in zlts company, which provides some references for deepening the understanding and improving the level of performance and work engagement of middle managers. However, we also found some limitations in the process of conducting the study, as well as providing some outlooks for future research.

(1) Limitations of sample selection: the sample of this study only selected the middle managers of zlts company as the research object, due to the limitation of time and resources, the sample size is relatively small, and it can't fully represent the whole group of middle managers. Therefore, the sample size can be enlarged in future studies to increase the participation of different industries and different companies in order to improve the external validity of the study.

(2) Limitations of data collection: The data used in this study relied mainly on questionnaire surveys and internal company performance appraisal data, and the acquisition of such data may be affected by subjective factors and individualism. Future studies may consider introducing objective data sources, such as company financial statements and market performance indicators, to improve the objectivity and credibility of the findings.

(3) Limitations of variable selection: this study focuses on the relationship between pay-for-performance intensity and work engagement, but it does not cover all the factors that may affect the performance and engagement of middle managers. Future research can continue to expand the choice of variables, such as leadership style and organisational culture, to obtain more comprehensive and accurate findings.

(4) Limitations of the research methodology: statistical methods such as correlation analysis were used to analyse the data in this study, and although they can reveal the relationship between the variables

## 5.3. Recommendations for Management Practices

Based on the analyses and studies of "An empirical study of the relationship between pay-for-performance intensity and work engagement of middle managers in zlts company", we have come up with the following recommendations for management practices:

(1) Setting a reasonable pay-for-performance system: According to research results, pay-for-performance intensity is positively correlated with the work input of middle managers. Therefore, it is suggested that when designing the performance pay system, the company should set up a reasonable pay incentive mechanism according to the work characteristics and requirements of different positions, so that it can stimulate the work motivation and enthusiasm of middle managers.

(2) Emphasis on the construction of work environment and culture: The results of the study also show that the work engagement of middle managers is closely related to the work environment and culture. Therefore, it is recommended that companies should focus on creating a positive working environment and providing good working conditions and all kinds of support in their management practices, so that middle managers can feel a sense of satisfaction and belonging to their work, thus increasing their level of work engagement.

(3) Provide good career development opportunities: There is a positive correlation between the pay-for-performance intensity of middle managers and their work commitment, which also implies that the growth and development of middle managers have an important impact on their work commitment. Therefore, the company should provide middle managers with good career development opportunities, including training, promotion and challenging work assignments, in order to satisfy their growth needs and stimulate their higher work commitment.

(4) Strengthening communication and feedback mechanisms: Good communication and timely feedback are crucial for middle management's commitment to their work. It is recommended that companies establish effective communication channels

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